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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,874	12/31/2001	Shinya Kano	VX012398	4013

21369 7590 10/05/2006

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EXAMINER

OSBORNE, LUKE R

ART UNIT	PAPER NUMBER
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2123

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/029,874	KANO, SHINYA	
	Examiner	Art Unit	
	Luke Osborne	2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2006.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 4-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/31/2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/13/2006 has been entered.

2. Claims 4-6 are pending in the instant application.

Claims 4-6 stand rejected.

Applicants' arguments submitted 6/20/2006 have been fully considered, Examiners response is as follows.

### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitations of claim 4-6 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. For clarification, if the limitations are present in the drawings the examiner requests that applicant's point out where each claimed limitation is found in the drawings.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

4. The specification is objected to under 37 CFR 1.74 (Reference to drawings). While the examiner notes that such a section is found within the instant specification the Examiner objects to the descriptions given. Albeit the descriptions are brief, however they lack any useful description.

Appropriate correction is required.

***Claim Objections***

5. Examiner acknowledges the cancellation of claims 1-3. Consequently the objections are withdrawn.

6. Claim 4 is objected to for the following reasons.

Claim 4 recitation of additional second three-dimensional models in lines 9 and 13 appear to define separate "second" models. It is difficult to determine whether the second models of line 9 and 13 are the model created in line 7. Appropriate correction is requested.

It is difficult to determine when the storing step of claim is taking place, which means it is unknown to the Examiner whether or not the stored information contains the deleted or modified part.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claim 5 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 5 contains the limitation "approximate position", this phrase is absent from the disclosure as filled. The Examiner has reviewed the disclosure and found description of such and "approximate position" as used in the claim.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 5 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "approximate" in claim 5 is a relative term, which renders the claim indefinite. The term "approximate" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. In the art of

CAD systems the position of the element is critical in nature, it is unclear whether Applicant's intend to cover all positions but the exact one or a smaller subset thereof.

Claims 5 and 6 recites the limitation "the incomplete second three-dimensional model". There is insufficient antecedent basis for this limitation in the claim. Claim 4 refers to three different incomplete second three-dimensional models, it is unclear which one claims 5 and 6 refer to.

### ***Response to Arguments***

#### **Applicant's Argue**

The differences between applicant's claimed invention and the teachings of Rappoport are significant, and therefore, these teachings cannot anticipate nor render obvious applicant's claimed invention. Since the device proposed by Rappoport is concerned with interpreting data between different CAD systems, this information and the use thereof in the completely different procedures of applicant's claims would not and cannot be suggested by these teachings. For such reasons, applicant respectfully submits that the teachings of Rappoport do not disclose or suggest the inventions defined in present claims 4-6.

#### **Examiners Response**

The Examiner has considered Applicant's arguments and found them to be unpersuasive. Regarding Applicant's allegation of non-analogous art the Examiner disagrees and traverses. The Examiner fails to see the distinction in the art applied and

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the invention as claimed. Both invention deal with reconstructing CAD models, as is readily apparent from Rappoport's disclosure and as indicated below.

***Claim Rejections - 35 USC § 102***

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 4-6 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S.

Patent No. 6,828,963 to Ari Rappoport, hereafter "Rappoport".

Regarding claim 4, Rappoport discloses a three-dimensional CAD system which forms a three-dimensional model by sequentially stacking a plurality of components to which shape data indicating shapes of the components and reference data indicating positions of the components are assigned, which displays the three-dimensional model on a screen, and which comprises:

storing shape data and reference data of a first three-dimensional model, when forming a second three-dimensional model by deleting or modifying a component of the first three-dimensional model [version and extraction/creation information, such as undo logs or rollback logs, can be created to back-out or re-write changes that fail when the CAD data exchange is taking place, or to recreate a particular instance of the CAD design (Column 5, lines 25-29)];



displaying an incomplete second three-dimensional model on the screen bade by deleting or modifying the component of the first three-dimensional model [FIG. 9B is a screen shot 905 detailing aspects of a selecting an object, which is one useful process to which the user emulation techniques can be applied (Column 13, lines 44-60)]; and

comparing the shape and reference data of the first three-dimensional model and shape and reference data of a second three-dimensional model to extract shape and reference data that are missing from the second three-dimensional model; and converting the extracted shape and reference data into information indicating the cause of the missing component and displaying the information on the screen

[FIGs. 9A-C depict aspects of user emulation, which is a fallback or alternative technique used to perform the extraction and creation processes... the user emulation techniques are used to gather information on wither the source CAD model or the target CAD model (Column 11, line 65 – Column 12, line 9) FIG. 9B is a screen shot 905 detailing aspects of a selecting an object, which is one useful process to which the user emulation techniques can be applied (Column 13, lines 44-60)].

Regarding claim 5, Rappoport discloses the three-dimensional CAD system according to claim 4, wherein an approximate position of the missing component is calculated and the missing component is displayed at the incomplete second three-dimensional model on the screen [FIG. 9B is a screen shot 905 detailing aspects of a selecting an object, which is one useful process to which the user emulation techniques can be applied (Column 13, lines 44-60)].

Regarding claim 6, Rappoport discloses the three-dimensional CAD system according to claim 4, wherein a modification plan to include the missing component on the incomplete second three-dimensional model is calculated and shown on the screen.

[Figure 9B, Although optional, a bridge structure 402' is shown in FIG. 6. The bridge structure 402' can be universal data type or product representation--that is, an intermediate data type that is not, strictly speaking, the target data type. Thus, the bridge structure 402' can include additional information concerning the source CAD model, the target CAD model, and extraction and creation information that can be used for a lossless, two-way data exchange (Column 10, lines 1-8)]


***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luke Osborne whose telephone number is (571) 272-4027. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul L. Rodriguez can be reached on (571) 272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LRO

  
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10/2/06